

```
#include <stdio.h>
```

```
int main() {
```

```
    int n, i;
```

```
    int bt[20], wt[20], tat[20];
```

```
    float avg_wt = 0, avg_tat = 0;
```

```
    printf("Enter the number of processes: ");
```

```
    scanf("%d", &n);
```

```
    printf("Enter burst time for each process:\n");
```

```
    for (i = 0; i < n; i++) {
```

```
        printf("P[%d]: ", i + 1);
```

```
        scanf("%d", &bt[i]);
```

```
    }
```

```
    wt[0] = 0; // First process has 0 waiting time
```

```
    // Calculate waiting time
```

```
    for (i = 1; i < n; i++) {
```

```
        wt[i] = 0;
```

```
        for (int j = 0; j < i; j++)
```

```
            wt[i] += bt[j];
```

```
    }
```

```
    // Calculate turnaround time
```

```
    for (i = 0; i < n; i++) {
```

```
        tat[i] = bt[i] + wt[i];
```

```

    avg_wt += wt[i];

    avg_tat += tat[i];
}

printf("\nProcess\tBurst Time\tWaiting Time\tTurnaround Time\n");
for (i = 0; i < n; i++) {
    printf("P[%d]\t%d\t%d\t%d\n", i + 1, bt[i], wt[i], tat[i]);
}

avg_wt /= n;
avg_tat /= n;

printf("\nAverage Waiting Time = %.2f", avg_wt);
printf("\nAverage Turnaround Time = %.2f\n", avg_tat);

return 0;
}

```

```

Enter the number of processes: 4
Enter burst time for each process:
P[1]: 5
P[2]: 8
P[3]: 6
P[4]: 3

Process Burst Time      Waiting Time      Turnaround Time
P[1]    5              0                5
P[2]    8              5                13
P[3]    6              13               19
P[4]    3              19               22

Average Waiting Time = 9.25
Average Turnaround Time = 14.75

...Program finished with exit code 0
Press ENTER to exit console.

```